

Remarks / Arguments

Interview

Applicant thanks the Examiner for the courtesy of the telephonic interview on July 26, 2005, in which the claim amendments made above were discussed.

Status of the Claims

Claims 1-20 were pending in the application. A non-final Office Action was issued on August 11, 2004, and the response thereto amended claims 1, 2, 4-5, 8, 11-17, 19-24, 27, 30-35 and 37, added claims 38-55, and cancelled claims 6, 7, 9, 10, 18, 25, 26, 28, 29, and 36. Subsequently, a final Office Action was issued on June 2, 2005. In this Amendment and Response, claims 1, 2, 8, 11, 12, 17, 20, 21, 27, 30, 31, 35, 38, 39, 40, 47, 48, 49 and 53 are amended and claims 43, 45, 52 and 54 are cancelled.

Upon entry of this Amendment and Response, there will be a total of 41 pending claims, with two independent claims, claims 1 and 20. Applicant originally filed and paid for 37 total claims, with 2 independent claims, and therefore the additional fee is enclosed.

Claim Rejections

Claims 1-5, 8, 12-17, 19-24, 27, 31-35, and 37-55 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,282,549 to Hoeffert et al. ("Hoeffert") in view of U.S. Patent Application Publication No. 2003/0088573 to Stickler ("Stickler"). Claims 11 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoeffert in view of Sticker and in further view of U.S. Patent No. 6,026,411 to Delp ("Delp").

Cited References

Hoeffert

Hoeffert is directed to a method and apparatus for "searching the Internet" and for providing "analysis of the content of files found in the search" (col. 2, lines 22-25).

Hoeffert describes “scan[ing] the media description file in each directory at a web site, and add[ing] the text based information stored there into the index being created by the crawler.” (col. 3, line 66 through col. 4 line 2). Examples of the text used to index the media file includes the URL, text strings, titles, keywords, and annotations. (see col. 6 lines 15-32). Hoeffert also describes “searching based on information signals stored inside the content.” (col. 8 lines 39-40). Such indices can include “a motion metric and brightness, contrast and color estimate.” (col. 8 lines 42-43).

Stickler

Stickler describes an information delivery system and a method that facilitate “the construction of tools and environments optimized for the management, referencing, distribution, storage, and retrieval of electronic media.” (par. 0028). As part of the Stickler system, “a core standard vocabulary and semantics utilizing metadata” is used to generate a “token” that “defines the metadata in the form of a property of the media.” (par. 0039 and 0052). The tokens are then used to create an “identity architecture” to store the tokens relating to the media. (para. 57). As part of the architecture, media elements are organized into a hierarchical structure ranging from a “storage item” representing “a single file or database record” at the lowest level of scope to a “media object which represents an [sic] body of information corresponding to a common organizational concept.” (para. 0057 – 0060). Stickler suggests possible examples of media objects can include a document, a book, video segment, audio, photograph, etc. (para. 0060).

Delp

Delp is directed to methods and systems for “building an image index and for querying by image colors images from the internet” (col. 1, lines 45-47). Delp describes creating an index file by “extrac[ing] color information from several levels within an image and mak[ing] it available for searching.” (col. 4, lines 27-28). In one embodiment where “efficiency is not a concern,” (col. 3 line 34) Delp describes a creating a histogram to “select the most popular samples” (col. 3 line 36) by “generat[ing] a variable size for the histogram bins depending on precision desired” (col. 5 lines 30-32) and determining

the most popular colors based on the number of pixels that fall into each bin. (FIG. 5). The resulting color samples are then used to create an index for the image. (col. 3 lines 40-41).

Independent Claims 1 and 20

Claims 1-5, 8, 12-17, 19-24, 27, 31-35, and 37-55 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoeffert in view of Stickler.

Neither Hoeffert nor Stickler, either alone or in combination, teach or suggest generating a data string for use in indexing a media element in response to relationships among a subset of pixels within a media file. With regard to media files generally, Hoeffert teaches creating a “media index [that] is generated by storing . . . information in an index format.” (col. 7 lines 20-21). The information used to create the media index includes “relevant lexical information” such as a filename, a URL, and embedded keywords. (col. 6 lines 14-32). The textural information is then used to create a “stored a media description file...[containing] a series of records of textual information for each media file within the current directory” (col. 3, lines 60-65). For example, the method taught by Hoeffert relies on author-supplied textual information such as HTML tags, surrounding text, or a URL (see col. 4, lines 24-45).

Hoeffert also describes a “scheme for determining the average frame difference for a pixel in a sequence of video” (col. 9, lines 37-39). To make such a determination, the Hoeffert system uses attributes of a video file “to determine if a given video file contains low, medium, or high amounts of motion” by calculating “a singled valued scalar” referred to as a “motion metric” (col. 9, lines 25-29). The motion metric, as described by Hoeffert, represents the “visual change activity” (col. 10 line 7) and is calculated by sampling some number of video frames and computing the differences in RGB values between each pixel for each frame. (See col. 10, lines 23-43). Similar methods are described with reference to motion vectors. (See col. 12, lines 1-18). Summarizing, the system described by Hoeffert selects data from a media file *without regard to the values of the data* to create a single, scalar value that is then used to tag the media element as having a particular property. However, Hoeffert does not teach or

suggest determining a pixel value, selecting a subset of pixels that have a substantially similar value to a particular pixel value, and using the relationships among the subset of pixels to create a data string for use in indexing a media element, as recited and amended in Applicant's independent claims 1 and 20, as amended.

Stickler does not cure the deficiencies of Hoeffert. As described above, Stickler uses a semantic architecture to identify and classify media elements, but does not look to individual pixel data to do so, and therefore does not teach selecting a subset of individual pixels within a media element on which to base an index.

Accordingly, Applicant respectfully submits that independent claims 1 and 20 are patentable over Hoeffert, either alone or in combination with Stickler. Applicant further submits that claims 2-5, 8, 12-17, 19, 21-24, 27, 31-35, 37-42, 44, 46-51, 53 and 55, which depend from independent claims 1 and 20 respectively, incorporate all of the limitations therein, and therefore are also patentable over each of the cited references, either alone or in combination. Applicant respectfully requests reconsideration and withdrawal of the rejections of claims 1-5, 8, 12-17, 19-24, 27, 31-35, 37-42, 44, 46-51, 53 and 55.

Claims 11 and 30

Claims 11 and 30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoeffert in view of Stickler, further in view of Delp. Generally, Applicant believes that Delp teaches comparing an index file generated based on the distribution of color within the image to an inventory of images or indices.

Applicant respectfully submits that Delp does not cure the deficiencies of Hoeffert and Stickler. Delp does not teach or suggest determining a pixel value, selecting a subset of pixels have a substantially similar value, and using the relationships among the subset of pixels to create a data string for use in indexing a media element, as recited in Applicant's amended independent claims 1 and 20, as amended, from which claims 11 and 30 depend, respectively.

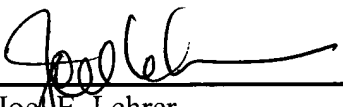
Applicant respectfully submits that even if the references provided motivation for their combination, which they do not, claims 11 and 30 are patentable over Hoeffert, Stickler and Delp, either alone or in combination, and request reconsideration and withdrawal of the rejection of claims 11 and 30 under 35 U.S.C. §103(a).

Conclusion

In view of the foregoing, Applicant believes that the case is in condition for immediate allowance. Early favorable action is respectfully solicited. The Examiner is invited to contact the undersigned discuss any outstanding issues.

Respectfully submitted,

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